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10/071,196	02/11/2002	Toshihiro Takagi	3064IT/50912	2937

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EXAMINER
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NEWLIN, TIMOTHY R

ART UNIT	PAPER NUMBER
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2623

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/071,196	<b>Applicant(s)</b> TAKAGI ET AL.	
	<b>Examiner</b> Timothy R. Newlin	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

Applicant's arguments with respect to claims 1, 5 and 7 have been considered but are moot in view of the new ground(s) of rejection. With respect to claims 2-4, 6, and 8-13, Applicant's arguments are not persuasive.

Claims 2 and 6 are rejected based on the combination of Liebenow and Alexander as cited below. Applicant argues that the combination would be undesirable because it would result in more complicated selection process than selecting from a menu. However, Liebenow expressly teaches that as an alternative to graphical menu selection (Fig. 5), users can select an identity using key on a remote control [**cols. 4-5, 59-4**]. This embodiment of Liebenow can be readily combined with the direction keys of Alexander to result in a system that chooses identities based on key presses rather than graphical menu selection. In this case the direction keys would not be used to scroll up and down a list but in concert with a second key in order to designate a user identity. The benefit is that there is no need to open a menu which may block content and requires an extra step. In this way, the identity selection is actually simplified, not complicated.

The remaining rejections were traversed based either on arguments addressed above or claim dependency. Therefore claims 3, 4, and 8-13 remain rejected.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 7, 8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow, US 6,530,083, in view of Kawasaki, US 5,031,045.

3. Regarding claim 1, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35];**

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the

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receiver for each user based on inputs by a plurality of users who use the input device

**[input device 118, col.4, 64-65];**

wherein the input device has a numeral inputting key for inputting a numeral when the operation mode is selected **[users may identify themselves via an enumeration, col. 4, 57-65];**

wherein the control unit assigns a predetermined selection number input by the user to the set operation mode and stores the selection number and the operation mode in correlation with each other in the memory **[col. 5, 16-18]** and

wherein when the user has operated the numeral inputting key to enter the selection number and the numeral inputting key does not coincide with a channel number stored in the memory, the control unit refers to the memory to select the operation mode that corresponds to the selection number thus entered **[the USER 1 keys taught by Liebenow meet the limitation of a numerical key that is pressed to select a mode, wherein the numeral does not coincide with a channel number in memory. The operation mode is selected because the USER 1 key corresponds to a selection number of an operation mode and does not coincide with a channel number in memory; col. 8, 16-31]** on the OSD display and a background display color individually for each user.

Liebenow is silent on comparing an input channel number to a stored channel map. Kawasaki teaches CATV terminal that includes a control unit that compares the number of the numeral inputting key entered by the user with a channel change number stored the memory to determine whether the number of the numeral inputting key

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coincides with the channel number stored in memory [**Abstract, Fig. 1, Fig. 3, col. 1, 55-62; col. 2, 5-15; col. 4, 18-21**]. Liebenow is an analogous system that controls a television receiver [**col. 3, 5-18**] and includes a memory to store user information. It would have been obvious to one skilled in the art that the functionality of Liebenow and Kawasaki could be combined so that a user can select both channels and user modes using a single remote control.

4. Regarding claim 5, Liebenow discloses a broadcasting receiver comprising:

a memory for storing an operation mode of the receiver [**memory 104 and 106, Fig. 1, col. 3, 40-50**];

a control unit for controlling each of the other sections of the receiver [**CPU 102, Fig. 1, col. 3, 19-24**]; and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select the operation mode of the receiver for each user based on inputs by a plurality of users who use the input device [**input device 118, col.4, 64-65**].

wherein the input device has a numeral inputting key for inputting a numeral when the operation mode is selected [**users may identify themselves via an enumeration, col. 4, 57-65**];

wherein the control unit assigns a predetermined input pattern by use of the numeral inputting key to the operation mode and stores the operation mode in correlation with the input pattern in the memory [**col. 5, 16-18; the input pattern used**

**in Liebenow is the user pressing the appropriate selection button once]** and, when the user operates the numeral inputting key in the input pattern, refers to the memory to select the operation mode that corresponds to the input pattern **[col. 8, 16-31]**.

Liebenow is silent with respect to a two-digit input pattern. Keenan teaches two-digit channel entry **[col. 3, 42-45; col. 4, 8-12]**, in which the input pattern is determined to in order to select the corresponding channel. Given its disclosure of selecting user modes, it would be obvious to one of ordinary skill to modify Liebenow to support two (or more) digit entry, for example to facilitate the entry and selection of more than ten user modes, or to allow a user to designate a custom two- or three-digit number for their mode.

5. Regarding claim 7, Kawasaki teaches a receiver wherein when the number of the numeral inputting key coincides with a channel number stored in the memory, the control unit causes a tuner to receive a channel corresponding to the channel number is selected **[col. 3, 3-8; cols. 3-4, 61-21]**.

6. Regarding claims 8 and 13, Liebenow discloses a digital/analog broadcasting receiver wherein when the control unit selects the operation mode when a broadcasting image is output to the display, the user has operated the numeral inputting key to enter the selection number and the number of the numeral inputting key does not coincide with a channel number stored in the memory **[the USER 1 keys taught by Liebenow meet the limitation of a numerical key that is pressed to select a mode, wherein**

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**the numeral does not coincide with a channel number in memory. The operation mode is selected because the USER 1 key corresponds to a selection number of an operation mode and does not coincide with a channel number in memory; col. 8, 16-31; for display].**

7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Kawasaki as cited above in view of Alexander et al., U.S. Patent No. 6,177,931.

8. Regarding claim 2, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35];**

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and



an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]**.

While Liebenow does not specifically show directional keys per se, it does teach the use of preassigned switches on an input device to select an operation mode for a specific user. Alexander discloses a system that customizes EPG presentation based on viewer profile information, including a remote input device having up/down and right/left keys **[Fig. 2]**. Liebenow expressly teaches that as an alternative to graphical menu selection (Fig. 5), users can select an identity using key on a remote control **[cols. 4-5, 59-4]**. This embodiment of Liebenow can be readily combined with the direction keys of Alexander to result in a system that chooses identities based on key presses rather than graphical menu selection. In this case the direction keys would not be used to scroll up and down a list but in concert with a second key in order to designate a user identity. The benefit is that there is no need to open a menu which may block content and requires an extra step. In this way, the identity selection is actually simplified, not complicated.

Moreover, Kawasaki teaches using abnormal button presses to designate additional functionality **[system interprets buttons held for more than 3 seconds to select a favorite channel, col. 3, 32-45]**. Thus, one of ordinary skill would recognize that the analogous method of a "shift key" input pattern could also be used to impart additional functionality, in this case to select a user mode. This would enable user

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mode selection without the use of a menu that would reduce the screen area available for programming **[see col. 3, 35-37]**.

9. Regarding claim 6, Liebenow discloses a broadcasting receiver comprising:
- a memory for storing an operation mode of the receiver **[memory 104 and 106, Fig. 1, col. 3, 40-50]**;
  - a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24]**; and
  - an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select the operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]**.

While Liebenow does not specifically show directional keys per se, it does teach the use of preassigned switches on an input device to select an operation mode for a specific user. Alexander discloses a system that customizes EPG presentation based on viewer profile information, including a remote input device having up/down and right/left keys **[Fig. 2]**. Liebenow expressly teaches that as an alternative to graphical menu selection (Fig. 5), users can select an identity using key on a remote control **[cols. 4-5, 59-4]**. This embodiment of Liebenow can be readily combined with the direction keys of Alexander to result in a system that chooses identities based on key presses rather than graphical menu selection. In this case the direction keys would not

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be used to scroll up and down a list but in concert with a second key in order to designate a user identity. The benefit is that there is no need to open a menu which may block content and requires an extra step. In this way, the identity selection is actually simplified, not complicated.

Moreover, Kawasaki teaches using abnormal button presses to designate additional functionality **[system interprets buttons held for more than 3 seconds to select a favorite channel, col. 3, 32-45]**. Thus, one of ordinary skill would recognize that the analogous method of a "shift key" input pattern could also be used to impart additional functionality, in this case to select a user mode. This would enable user mode selection without the use of a menu that would reduce the screen area available for programming **[see col. 3, 35-37]**.

10. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Kawasaki in view of Thompson et al., U.S. Patent No. 5,644,354.

11. Regarding claim 3, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35]**;

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]** characterized in that,

the input device has a numeral inputting key for inputting a numeral when the operation mode is selected **[users may identify themselves via an enumeration, col. 4, 57-65];** and

the control unit assigns a predetermined selection number input by the user to the set operation mode and stores the selection number and the operation mode in correlation with each other in the memory **[col. 5, 16-18]** and also, when the user has operated the numeral inputting key to enter the selection number, refers to the memory to select the operation mode that corresponds to the selection number thus entered **[col. 8, 16-31].**

The mode selection in Liebenow does not activate based on pressing a button for a predetermined time. Thompson discloses a video guide system that

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identifies the desired button function based on the user holding down the button for a predetermined time **[col. 8, 2-8]**. The function of the button is specifically related to holding down the button rather than pressing it quickly. It would have been obvious to one of skill in the art to select an operation mode as taught by Liebenow in response to a button pressed for a predetermined time as taught by Thompson. As suggested by Thompson, one would be motivated as such in order to distinguish between pushing the button to achieve the normal function associated with that button and pushing the button to select a mode **[see col. 8, 5-8]**.

12. Regarding claim 11, Liebenow does not explicitly teach pressing, for less than a predetermined time, a numerical key to tune the channel whose number corresponds to that key. Official notice is taken that using a numeric key (by pressing it once and not holding it for any predetermined length of time) to select a channel with the corresponding number is a fundamental and obvious technique of using a remote control. One of ordinary skill in the television art would know that using the remote control of Liebenow in this way would allow users to easily select a numbered channel.

13. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Kawasaki as cited above in view of Thrane, U.S. Patent No. 7,149,969. Liebenow discloses the limitations of claims 1 and 5 as discussed above, but does not show the customization of font and color. Thrane concerns a server/client architecture

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in which presentation format is modified according to user preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type, size, and display color of the channel information displayed **[font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]**. Thrane also states the motivation to for dynamic adjustment of broadcast content **[abstract; col. 1, 59-62]**. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow, Kawasaki, and Alexander as cited above with respect to claim 2, and further in view of Thrane, US 7,149,969. Liebenow and Alexander disclose the limitations of claim 2 as discussed above, but do not show the customization of font and color. Thrane concerns a server/client architecture in which presentation format is modified according to user preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type,

size, and display color of the channel information displayed **[font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]**. Thrane also states the motivation to for dynamic adjustment of broadcast content **[abstract; col. 1, 59-62]**. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Thompson as cited above with respect to claim 3, and further in view of Thrane, US 7,149,969. Liebenow and Thompson disclose the limitations of claim 3 as discussed above, but do not show the customization of font and color. Thrane concerns a server/client architecture in which presentation format is modified according to user preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type, size, and display color of the channel information displayed **[font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]**. Thrane also states the motivation to for dynamic adjustment of broadcast content **[abstract; col. 1, 59-62]**. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in

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order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/



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